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| 09/648,376 | 08/25/2000 | David W. Cannell | 05725.0633-00 | 5418 |
| 22852 | 7590 | 08/11/2005 | EXAMINER | |
| FINNEGAN, HENDERSON, FARABOW, GARRETT & DUNNER LLP 901 NEW YORK AVENUE, NW WASHINGTON, DC 20001-4413 | | | WANG, SHENGJUN | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 1617 | |

DATE MAILED: 08/11/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/648,376

Applicant(s)

CANNELL ET AL

Examiner

Shengjun Wang

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 May 2005.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12, 16-36, 38-40, 44-50 and 53 is/are pending in the application.
- 4a) Of the above claim(s) 4, 27-40 and 44-49 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 5-12, 16-26, 50 and 53 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Receipt of applicants' amendments and remarks submitted May 24, 2005 is acknowledged.

Claim Rejections 35 U.S.C. 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-3, 5-12, 16-26, 50 and 53 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dubief et al. (US 5,700,456, IDS) in view of Cauwet et al. (US 5,656,258, of record), Grollier et al. (US 5,958, 392).

2. Dubief teaches a cosmetic composition comprising ceramide compounds and a cationic polymer. The composition is particularly useful for protecting hairs. See, particularly, the abstract, and the claims. The elected ceramide and cationic polymer are particularly employed in a composition. See, particularly, example 7. The composition may further comprise other well-known cosmetic ingredients, such as thickener, preservatives, etc. The composition may be in various forms, such as liquid, cream, gel. The composition may be used before or after shampoo, perm, bleaching or dyeing. See, particularly, columns 8-9.

Dubief does not teach expressly the employment of amphoteric polymer in the composition, or polyquaternium-22, also known as MERQUAT 280.

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However, Grollier et al. teaches the employment of a combination of cationic polymer and amphoteric polymer in hair cosmetic composition. Such combination has overcome many disadvantages of compositions using cationic polymer alone or using other combination. See, particularly, column 1, lines 16-59, and the claims. Among the disclosed amphoteric polymers are copolymers of acrylic acid and dialkylaminoalkyl acrylamide. See, column 2, line 20 to column 6, lines 20. The cation polymers include the polymer herein elected. See, particularly, column 6, lines 21 to column 12, line 30. The molecular weight of the polymers is 500 to 2,000,000, and the amounts of such polymers employed in the cosmetic composition are 0.01 to 10% by weight. See, particularly, the claims. Cauwet et al. teaches that polyquaternium-22, or MERQUAT 280 is a known amphoteric copolymer of acrylic acid and dialkylaminoalkyl acrylamide, and is particularly useful in hair treating composition with cation polymers. Cauwet also teaches the benefit of combination of cation polymer and amphoteric polymer in hair treating composition. See, particularly, the abstract, column 1, lines 49 bridging to column 2, line 65, column 3, lines 1-38, column 6, lines 10-28.

Therefore, it would have been prima facie obvious to a person of ordinary skill in the art, at the time the claimed invention was made, to employ a combination of the cation polymer and the amphoteric polymer herein in Dubief' composition.

A person of ordinary skill in the art would have been motivated to employ a combination of the cation polymer and the amphoteric polymer herein in Dubief' composition because of the advantage of the combination of cation polymer and amphoteric polymer disclosed by Grollier et al. and Cauwet et al. Further, making a kit comprising the composition herein and other hair treating composition, such as hair dyeing composition is obvious to one of ordinary skill in the

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art because such composition is known to be particularly useful before or after other hair treatment.

3. As to the particular ratio of the two polymers herein, note bother Grollier et al. and Cauwet et al. teaches the benefit of the combination of cationic polymer and amphoteric polymers, and bother teach a broad range of the ratio of the polymers. See, particularly, claim 1 in Cauwet et al. (any synergistic combination), and claim 16 in Grollier et al. (ratio of 10:1 to 1:10). It is well settled that in the case where the claimed ranges “overlap or lie inside ranges disclosed by the prior art” a prima facie case of obviousness exists. In re Wertheim, 541 F.2d 257, 191 USPQ 90 (CCPA 1976); In re Woodruff, 919 F.2d 1575, 16 USPQ2d 1934 (Fed. Cir. 1990) (The prior art taught carbon monoxide concentrations of “about 1-5%” while the claim was limited to “more than 5%.” The court held that “about 1-5%” allowed for concentrations slightly above 5% thus the ranges overlapped.). Therefore, the cited ratio herein would have been obvious to one of ordinary skill in the art, absent evidence showing the criticality of the ratio.

Response to the Arguments

Applicants' remarks submitted May 24, 2005 have been fully considered, but found unpersuasive.

4. In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). In the instant case, the cited references, as a whole, teaches the benefit of combination of cationic polymer and amphoteric polymer in general, and polyquaternium in particular. The examiner recognizes that Grollier

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does not expressly teach the particular amphoteric polymer. However, Cauwet et al. teach the amphoteric polymer is similarly useful in combination with cationic polymer. Therefore the combination of the two polymers herein would have been obvious to one of ordinary skill in the art.

As to the particular ratio herein, note, question under 35 U.S.C. 103 is not merely what reference expressly teach, but what they would have suggested to one of ordinary skill in the art at the time the invention was made; all disclosures of prior art, including unpreferred embodiments, must be considered. In re Lamberti and Konort (CCPA), 192 USPQ 278. In the instant case, both Grollier et al. and Cauwet et al. teach the benefit of the combination of cationic polymer and amphoteric polymers, and both teach a broad range of the ratio of the polymers. See, particularly, claim 1 in Cauwet et al. (any synergistic combination), and claim 16 in Grollier et al. (ratio of 10:1 to 1:10). The examiner noted the particular ratio herein does not fall within the preferred ratio of Cauwet et al. However, not being the preferred embodiment of prior art alone is not sufficient for unobviousness from the prior art. It is well settled that disclosed examples and preferred embodiments do not constitute a teaching away from a broader disclosure or non-preferred embodiments. In re Susi, 440 F.2d 442, 169 USPQ 423 (CCPA 1971). "A known or obvious composition does not become patentable simply because it has been described as somewhat inferior to some other product for the same use." In re Gurley, 27 F.3d 551, 554, 31 USPQ2d 1130, 1132 (Fed. Cir. 1994). Therefore, absent evidence showing an unexpected benefit residing in the particular ratio herein, the claims have been properly rejected.

5. In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the

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teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, the teaching, suggestion and motivation are found in the cited references and the knowledge generally available to one of ordinary skill in the art. Particularly, the cited references disclosed that it is well known in the art to use a combination of cationic polymer and amphoteric polymers in cosmetic composition, and each of the particularly polymers herein are known to be used in such combination.

Applicants further contend that the cited references as a whole do not teach or suggest all the limitations recited in the claims, particularly, the ratio of cationic polymer to polyquaternium-22. Applicants specifically argue that Cauwet et al. do not teach the ration herein recited, citing the preferred ratios disclosed by Cauwet et al. The examiner respectfully disagrees. The examiner reiterates that “not being the preferred embodiment of prior art alone is not sufficient for unobvious from the prior art. It is well settled that disclosed examples and preferred embodiments do not constitute a teaching away from a broader disclosure or no preferred embodiments. *In re Susi*, 440 F.2d 442, 169 USPQ 423 (CCPA 1971).” A preferred embodiment is not a limitation of teaching. Claim 1 in Cauwet et al. states “wherein the (a) polymer and the (b) copolymer are present in a weight ratio synergistically effective with respect to at least one cosmetic property.” Applicants may not read too much of the specification into the claims. It is further noted that Grollier et al. disclosed a broad ratio range of cationic polymer/amphoteric polymer. The cited references as a whole would have clearly suggested that

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the combination of a cationic polymer, and an amphoteric polymer (such as polyquaternium-22) would provide synergistic benefit to a cosmetic composition. The particular ratio range herein (greater than 3:1) would have been obvious over the range disclosed in the prior art (1:10 to 10:1, and a synergistic combination).

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shengjun Wang whose telephone number is (571) 272-0632. The examiner can normally be reached on Monday to Friday from 7:00 am to 3:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sreeni Padmanabhan, can be reached on (571) 272-0629. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications

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may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll free).

SHENGJUN WANG
PRIMARY EXAMINER

Shengjun Wang
Primary Examiner
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